

**Synonym**

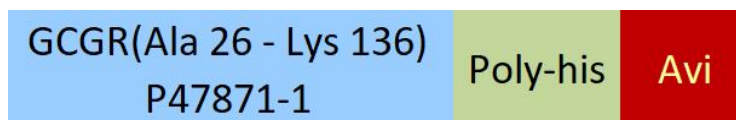
Glucagon R, GCGR,Glucagon receptor

**Source**

Biotinylated Human GCGR / Glucagon receptor, His,Avitag™(GCR-H82E3) is expressed from human 293 cells (HEK293). It contains AA Ala 26 - Lys 136 (Accession # [P47871-1](#) ).

Predicted N-terminus: Ala 26

**Molecular Characterization**



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™). The protein has a calculated MW of 16.6 kDa. The protein migrates as 27-35 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Labeling**

*Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.*

**Protein Ratio**

Passed as determined by the HABA assay / binding ELISA.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>90% as determined by SDS-PAGE.

**Formulation**

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

**Reconstitution**

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

**Storage**

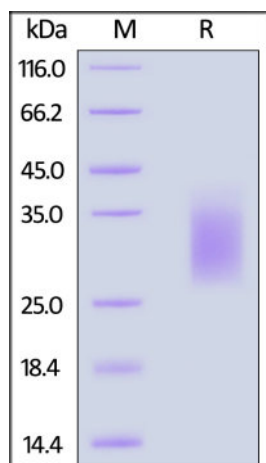
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**SDS-PAGE**



Biotinylated Human GCGR / Glucagon receptor, His,Avitag™ on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

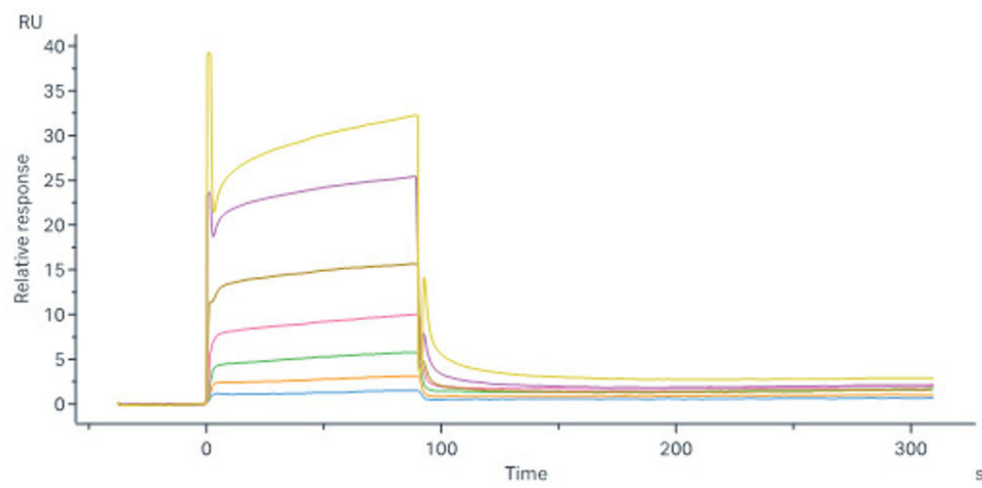
**Bioactivity-SPR**

**SEC-MALS**



The purity of Biotinylated Human GCGR / Glucagon receptor, His,Avitag™ (Cat. No. GCR-H82E3) is more than 85% and the molecular weight of this protein is around 24-34 kDa verified by SEC-MALS.

[Report](#)



Biotinylated Human GCGR / Glucagon receptor, His,Avitag (Cat. No. GCR-H82E3) immobilized on CM5 Chip can bind GLP-1 (7-37) with an affinity constant of 48.5  $\mu$ M as determined in a SPR assay (Biacore 8K) (QC tested).

### Background

G-protein coupled receptor for glucagon that plays a central role in the regulation of blood glucose levels and glucose homeostasis. Regulates the rate of hepatic glucose production by promoting glycogen hydrolysis and gluconeogenesis. Plays an important role in mediating the responses to fasting. Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of down-stream effectors, such as adenylate cyclase. Promotes activation of adenylate cyclase. Besides, plays a role in signaling via a phosphatidylinositol-calcium second messenger system.

### Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.